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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/608,169	06/30/2000	Takayuki Urata	43890-430	9745

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Washington, DC 20005-3096

EXAMINER

PATTERSON, MARC A

ART UNIT	PAPER NUMBER
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1772

13

DATE MAILED: 05/16/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

A9-13

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/608,169	URATA ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Marc A Patterson	1772	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 20 February 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-4 and 13-16 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4 and 13-16 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All   b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### WITHDRAWN REJECTIONS

1. The 35 U.S.C. 112 second paragraph rejection of Claims 1 – 4 and 15 – 16, 35 U.S.C. 102(b) rejection of Claim 1 – 3 and 13 – 15 as being anticipated by Awata (U.S. Patent No. 5,866,228) and 35 U.S.C. 103(a) rejection of Claims 4 and 16 as being unpatentable over Awata (U.S. Patent No. 5,866,228) in view of Cheng et al (U.S. Patent No. 4,745,015), of record on page 2 of the previous Action, are withdrawn.

### NEW REJECTIONS

#### *Claim Rejections - 35 USC § 112*

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claim 1 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. With regard to Claim 1, the phrases ‘a support layer,’ ‘a deposition layer,’ ‘a protective layer’ and ‘a seal layer’ are indefinite as it is unclear whether the phrases define distinct, separate layers. For purposes of examination, the phrases will be assumed to mean ‘a first support layer,’ ‘a second deposition layer,’ ‘a third protective layer’ and ‘a fourth seal layer.’ The phrase ‘formed by junction of the seal layer’ is indefinite, as its meaning is unclear. The phrase also appears to be directed to a method limitation, which is given little patentable weight as discussed below. Claim 1 recites the limitation "said inside" in line 3. There is insufficient antecedent basis for this limitation in the claim. Claim 1 recites the limitation "a

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surface" in line 5. There is insufficient antecedent basis for this limitation in the claim. Claim 1 recites the limitation "a surface" in line 6. There is insufficient antecedent basis for this limitation in the claim.

4. Claims 2 – 4 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. With regard to Claim 2, the phrases ‘a support layer’ and ‘a deposition layer’ are indefinite as it is unclear whether the phrases define distinct, separate layers. For purposes of examination, the phrases will be assumed to mean ‘a first support layer’ and ‘a second deposition layer.’ Claim 2 recites the limitation "said inside" in line 3. There is insufficient antecedent basis for this limitation in the claim. Claim 2 recites the limitation "deposition film" in line 6. There is insufficient antecedent basis for this limitation in the claim. Claim 2 recites the limitation "support film" in line 6. There is insufficient antecedent basis for this limitation in the claim.

5. Claims 13 – 16 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. With regard to Claim 13, the phrases ‘a support layer’ and ‘a deposition layer’ are indefinite as it is unclear whether the phrases define distinct, separate layers. For purposes of examination, the phrases will be assumed to mean ‘a first support layer’ and ‘a second deposition layer.’ Claim 13 recites the limitation "said inside" in line 3. There is insufficient antecedent basis for this limitation in the claim. Claim 13 recites the limitation

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"deposition film" in line 6. There is insufficient antecedent basis for this limitation in the claim.

Claim 13 recites the limitation "support film" in line 6. There is insufficient antecedent basis for this limitation in the claim.

### ***Claim Rejections - 35 USC § 102***

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Awata (U.S. Patent No. 5,866,228).

With regard to Claim 1, Awata discloses a vacuum heat insulator (therefore an insulator for an insulating device; column 2, line 2) comprising a laminate bag (column 4, lines 15 – 23) and an insulating core placed in the laminate bag (calcium silicate; column 4, lines 44 – 49) wherein the inside of the laminate bag is evacuated to vacuum (column 4, lines 44 – 54), the laminate bag is made of a laminate film comprising a first support layer, second deposition layer placed at the surface of the support layer, third protective layer (polyethylene terephthalate; column 6, lines 40 – 56) and fourth seal layer (column 4, lines 36 – 43); the deposition layer comprises aluminum (column 4, lines 30 – 35), and the laminate bag comprises a seal portion (it is heat sealed; column 4, lines 36 – 43). With regard to the claimed aspect of the seal portion being 'formed by junction of the seal layer and the laminate film,' the scope of the claims falls within the limitations of Awata as discussed above. The method of making (forming) the seal is given little patentable weight.

***Claim Rejections - 35 USC § 103***

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 2 – 3 and 13 – 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Awata (U.S. Patent No. 5,866,228) in view of The Encyclopedia of Polymer Science and Engineering (Volume 12, page 225, 1985).

Awata teaches an insulator comprising a plastic film comprising polyethylene terephthalate as discussed above. With regard to Claims 2 – 3 and 13 – 15, Awata fails to disclose a polyethylene terephthalate having a glass transition temperature of 87 degrees Celsius or higher.

The Encyclopedia of Polymer Science and Engineering (Volume 12, page 225, 1985) teaches that polyethylene terephthalate polymers having a glass transition temperature of greater than 87 degrees Celsius is equivalent to other polyethylene terephthalate polymers for the purpose of providing a commercial grade polyethylene terephthalate polymer (The Encyclopedia of Polymer Science and Engineering, Volume 12, page 225; final paragraph, ‘Thermal Transitions’). The desirability of providing for polyethylene terephthalate having a glass transition temperature of greater than 87 degrees Celsius in Awata, which comprises a polyethylene terephthalate, would therefore be obvious to one of ordinary skill in the art.

It therefore would have been obvious for one of ordinary skill in the art at the time Applicant’s invention was made to have provided for polyethylene terephthalate having a glass

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transition temperature of greater than 87 degrees Celsius in Awata in order to provide a commercial grade polyethylene terephthalate as taught by The Encyclopedia of Polymer Science and Engineering (Volume 12, page 225, 1985).

10. Claims 4 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Awata (U.S. Patent No. 5,866,228) in view of Cheng et al (U.S. Patent No. 4,745,015).

Awata discloses an insulator comprising a plastic film comprising polyethylene terephthalate as discussed above. With regard to Claims 4 and 16, Awata fails to disclose a film comprising polycarbonate.

Cheng et al teach that polycarbonate is equivalent to polyethylene terephthalate (column 3, lines 7 – 38) for the purpose of making an insulator which is readily molded or shaped (column 3, lines 7 – 38). The desirability of providing for a film comprising polycarbonate in Awata, which is an insulator, would therefore be obvious to one of ordinary skill in the art.

It therefore would have been obvious for one of ordinary skill in the art at the time Applicant's invention was made to have provided for polycarbonate in Awata in order to make an insulator which is readily molded or shaped as taught by Cheng et al.

#### ANSWERS TO APPLICANT'S ARGUMENTS

11. Applicant's arguments regarding the 35 U.S.C. 112 second paragraph rejection of Claims 1 – 4 and 15 – 16, 35 U.S.C. 102(b) rejection of Claim 1 – 3 and 13 – 15 as being anticipated by Awata (U.S. Patent No. 5,866,228) and 35 U.S.C. 103(a) rejection of Claims 4 and 16 as being unpatentable over Awata (U.S. Patent No. 5,866,228) in view of Cheng et al (U.S. Patent No. 4,745,015), of record on page 2 of the previous Action, have been considered and have been

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found to be persuasive. The rejections are therefore withdrawn. The new 35 U.S.C. 112 second paragraph rejection of Claims 1 – 4 and 13 – 16, 35 U.S.C. 102(b) rejection of Claim 1 as being anticipated by Awata (U.S. Patent No. 5,866,228), 35 U.S.C. 103(a) rejection of Claims 2 – 3 and 13 – 15 as being unpatentable over Awata (U.S. Patent No. 5,866,228) in view of The Encyclopedia of Polymer Science and Engineering (Volume 12, page 225, 1985) and 35 U.S.C. 103(a) rejection of Claims 4 and 16 as being unpatentable over Awata (U.S. Patent No. 5,866,228) in view of Cheng et al (U.S. Patent No. 4,745,015) above are directed to amended Claims 1 – 4 and 13 – 16.

### *Conclusion*

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marc Patterson, whose telephone number is (703) 305-3537. The examiner can normally be reached on Monday through Friday from 8:30 AM to 5:00 PM. If attempts to reach the examiner by phone are unsuccessful, the examiner's supervisor, Harold Pyon, can be reached at (703) 308-4251. FAX communications should be sent to (703) 872-9310. FAXs received after 4 P.M. will not be processed until the following business day.

Marc A. Patterson, PhD.

*Marc Patterson*  
Art Unit 1772

  
HAROLD PYON  
SUPERVISORY PATENT EXAMINER  
*1772* *5/14/03*